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AN

INTRODUCTORY LECTURE,

DELIVERED AT THE

COLLEGE OF PHYSICIANS AND SURGEONS

OF THE

CITY OF NEW-YORK,

NOV. 5, 1830.

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BY JOHN B. BECK, M. D.

Professor of Materia Medica and Medical Jurisprudence in the University of the
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TO THE STUDENTS
OF THE
COLLEGE OF PHYSICIANS AND SURGEONS
OF THE CITY OF NEW-YORK,
THE FOLLOWING LECTURE IS AFFECTIONATELY INSCRIBED,
BY THEIR FRIEND
THE AUTHOR.



LECTURE.

IN the whole career of human existence, there is perhaps no question to the determination of which a man may be called, so really important to himself as that which relates to the business or profession which is to occupy the thoughts and labours of his future life. According to the decision which he here makes, may his fortunes be prosperous or adverse, and his name destined to honour or contempt. The reason is obvious. Man is the creature of circumstances. Constituted by his Creator a social being—endowed with susceptibilities of being influenced by others of his species, it is evident that his character and destiny must, to a very great extent, be controlled by the associations which necessity—or accident—or fortune may have forced upon him. Hence it is that by education and example he is formed to good or to evil. By the kindred spirits with whom he sympathizes and acts, he is stirred to lofty purposes and a noble ambition, or sunk into base thoughts and unworthy practices.

It is not merely, however, this general influence, which, more or less extensively, is felt in every occupation and in every situation in life, that invests with so high an interest.

the choice of a profession. The minds of men differ as much as their physical structures. It is impossible therefore that all can apply themselves to the same subject with equal chances of success. On this account it is that instances are so frequently met with of men, even of powerful understandings and abundant knowledge, proving unsuccessful in particular professional avocations. Energies are lost or wasted on subjects unsuited to their nature, which had they been directed to other and more congenial pursuits, would have placed them in the foremost ranks of successful competition, and perhaps transmitted their names with renown to after ages.

It is evident, therefore, that much of a man's character in life may depend upon the profession which he may select, and the adaptation of it to his peculiar powers.

You, Gentlemen, have made this selection, and, I doubt not, with a due regard to its just importance : and you have chosen a study which in its dignity, general interest, and extended practical utility, is inferior to none. Of its dignity and utility, it is almost unnecessary to say any thing. Its claims to these do not rest upon the dubious grounds of abstract speculation—they are laid deep in nature. There is nothing so valuable to man as his life ; and the means designed to save and prolong it must be viewed as among the greatest of earthly blessings. Hence it is that wherever human beings have been found, Medicine has always been held in the highest esteem. While in civilized society and among cultivated nations, it has been looked upon as one of the noblest and most liberal of arts, among savage nations it has been

invested with a character more sacred, and allied to the Divinity itself. A concurrence of opinion so universal among mankind—in countries most remote from each other—in periods most distant—of nations the most rude and the most refined, could never have existed without a sure and just foundation in truth. Of the general estimation therefore in which medicine is held, as well as of its public utility, there can be no doubt. It is not in these points of view solely, however, that it should be looked upon by those who propose to make it the study of their lives. They should look upon it in its relations to the wide range of human knowledge, and the influence which it may exercise immediately or remotely upon their intellectual and moral natures. It is only by such an analysis that the question can be decided, whether they are about to devote their labours to studies which shall mature and expand and brighten their faculties, and render their career honourable to themselves and useful to the world.

In casting round for a subject on which I might address you on the present occasion, it has struck me that there could be none more appropriate than such an analysis of the study of medicine, mainly with a view of urging upon you its proper cultivation. The subject is one of interest and importance, and to do full justice to it would require more time and discussion than could with propriety be appropriated to the present exercise. I shall therefore confine myself to a rapid notice of two or three important points, reserving the rest to some future opportunity.

The great and leading idea that I would present to you, is,

that the science of medicine is essentially *the study of man*. To a certain extent this is true, also, of the other liberal professions : not however in the broad sense in which it is so of medicine. Man is a compound being, and it is only here that in all his parts, animal, moral and intellectual, he is made the subject of profound investigation. It is this knowledge of man, which in fact is the basis of our science. He is accordingly first considered and analyzed as an animated piece of mechanism, furnished with certain organs and endowed with certain powers designed to support and prolong his own existence, and to perpetuate the species. Next he is viewed as the creature of passions, under whose stormy sway he is impelled to good or to evil, rendered happy or miserable. Finally he is contemplated as gifted with an intellectual nature, shining out gloriously in those mental operations which so pre-eminently raise our species over the brute creation. Now, constituted as man is, all these different parts of his being reciprocally influence each other. At one time, we see the whole physical organization agitated and disturbed by the fury of the passions, or sinking before the deeper impulses of the intellect. Then again, we see the passions running wild, and the intellect itself shaken on its very throne, by perverted conditions of the physical organs. To trace out ~~the~~ these relations and to mark their varied results, as it is one of the most profound, so is it one of the most interesting and important studies connected with our science.

But it is not merely as an *individual*, that man is to be examined. In all his relations with the species, under all the

various circumstances, and in all the different situations in which he may be found, he is to be analyzed. When first placed upon this earth, his dwelling limited to one region, using the same diet, subject to the same atmospheric vicissitudes, and influenced by the same moral and religious causes—the probability is, that for a long period the human family was characterized by striking resemblances. Diseases were few and simple ; and the susceptibility of the system to the impression of external agents, whether noxious or salutary, morbid or medicinal, marked by a general uniformity. In process of time, however, man overleapt the limits of his original habitation, and urged his way to other and remote regions, until finally he overspread the surface of the earth ; and he is now found under every climate, in every state of society, with manners and customs the most diverse. Yielding to the sway of varying causes, he now loses his uniformity. Preserving only those great general features which identify the unity of his origin, in other respects he becomes changed and modified. His colour varies, and we see in one part of the globe, the white man ; in another, he assumes the yellow or olive tint ; in a third, we find him of the red or copper colour ; in a fourth, brown or tawny ; while in another, he is perfectly black. Along with his colour, his structure undergoes various modifications, and hence we have what are called the different varieties of the human race. From the same causes, the vital properties of the system become modified. In cold northern regions, the general sensibility is blunted by the rigour of the climate. While the muscular system is fully developed, the brain and nerves exert but little

influence. There is a general dullness and slowness of body as well as of mind : capable of great efforts when roused, but requiring extraordinary excitements to rouse them. In equatorial regions, the reverse of all this is seen. Here the nervous system predominates. All the sensibilities are awake. The skin, constantly stimulated by the heat of the climate, keeps up a corresponding excitement in the digestive organs. While the muscular system is enfeebled, there is a general excitability, which is called into full development by the slightest stimulants. It is owing to this, that so marked a difference is found in the effects which are produced by stimulating liquors upon the inhabitants of northern and southern regions. What would intoxicate the latter, produces scarcely any effect upon the former. ‘A quantity which barely ruffles the frozen current of a Norwegian’s blood, would scatter madness and fever into the brain of the Hindoo.’ The mind itself participates in these effects—the imagination rises ascendant over the other faculties—and man sinks into indolence and voluptuousness.

If we follow man still further and trace him in different states and stages of society, we shall find him marked by striking peculiarities. In one he will be found with a body irritable, and a mind inactive and obtuse; while in another, he will be exhibited as the victim of sensibility and excitement, physical as well as moral.

Now in all these varied conditions man is to be studied in all his peculiarities, inasmuch as upon these depend, not merely the character of the diseases to which he may be subject, but also the mode in which they are to be treated.

Extensive and profound however as this investigation may already appear, it is very evident that it would be exceedingly defective were it not, at the same time, connected with the study of the various agents which exert their modifying influences over the human frame. Hence it is that medicine levies contributions upon almost every department of human knowledge. Artificial agents too, employed in the cure of diseases, are to be carefully investigated, and as they are drawn from the different kingdoms of nature, they form a natural association with a number of sciences, the most elegant and useful.

From this simple view of the nature of medical science, it must be obvious that it is of vast extent and abundant variety. Even to those who have no idea of practising it, there is no subject which can form so proper and solid a basis for the study of general science, or for any other professional pursuit, to which taste or ambition may subsequently invite. The natural tendency of all individual studies, to a certain extent, is adverse to any great enlargement of the mental faculties. By making one subject a matter of paramount attention, the mind is led to attach an undue importance to it. Indeed, so much of the grand capital of a man's life, labour and time, may have been expended upon it as to invest it with a real consequence to him, which intrinsically it does not possess. In proportion as this feeling predominates, the mind is abstracted from other subjects, and insensibly depreciates their value. All the professions suffer from this cause, more or less, and all professional men feel the deleterious influence of it on their intellectual powers.

To this general tendency of professional pursuits, medicine, however, is the least obnoxious ; and the reason obviously is, because it is based on a wider extent of knowledge, and presents to the mind a more expanded and liberal view of the relations of man to the various sources of knowledge, as well as of the connexion and dependencies of the sciences upon one another.

Hence it is that medicine has always sustained so high a reputation among the learned. Sir William Temple says of it, " it is certain that the study of physic is not achieved in any eminent degree, without very great advancement in the sciences ; so that whatever the profession is, the professors of it have been generally very much esteemed on that account, as well as of their own art, as the most learned men of their ages." Hence too can be explained, very readily, the fact of the versatility of physicians, and the facility with which they can pass from their own profession to other studies and occupations, and why they are found to excel frequently more in these than they would have done in medicine. The study of medicine puts it in their power to take a general and wide view of all the departments of knowledge, and thus enables them to select for especial pursuit such as may be most congenial to their taste. In this way it is that scarcely a spot in the vast domain of science has been left untrodden by the footsteps of medical men. Chemistry, so wonderful in itself and so incalculable in its applications to the useful arts, owes every thing to the labours of physicians. Who are our zoologists, geologists, botanists, mineralogists ? Generally, physicians. In the noble expeditions fitted out

by enlightened monarchs and governments, to extend the knowledge of our earth, who have been among the most efficient agents in carrying them through? Why, physicians. Indeed, wherever curiosity, enterprise, or the love of science have drawn men, there you will find the votary of medical science. At one time you see him diving into the mysteries of Babylonian antiquities—then unravelling the manuscripts of Herculaneum—now expounding the subtleties of metaphysical science—or shining in the walks of elegant literature. At one time you see him scaling the Alps or the Andes—at another exploring the treasures of the ocean. You see him in the frozen regions of the north, and under the burning suns of the tropics—the pilgrim of the desert—the companion of savage beasts and still more savage men; and amid hardships, and privations, and dangers, and sufferings, he is borne along by an enthusiasm as powerful as it is unquenchable.

Now it is self-evident, that any study which has the magic influence of thus setting on fire in its votaries, the love of science, and inspiring them with a zeal so noble, cannot but have a broad and liberal foundation. Without wishing to be invidious, it may boldly be asked, what other profession can claim to itself this honour?

It has been a common objection to our science, that it is not certain in its principles—in other words, that it is a *conjectural art*. That such an opinion should be entertained by those who look at medicine simply on the surface, is not to be wondered at; and all who have not made it the subject of especial study, may be considered as in this condition.

Ignorant of its real claims to confidence, they judge of it from insulated facts and occurrences in ordinary practice, where apparent contradictions are continually presenting themselves; or what is still more unjust, they form their opinion of it from the speculations and theories of vain and superficial minds, or the absurdities and ignorance of practitioners unworthy of the noble science which they profess.

Tested by such a rule, every other science and art might be shown to be equally uncertain and conjectural. What can be more contradictory than the opinions of those who practise the profession of the law? And yet what man laying claim to even ordinary intelligence, will not allow that the great principles of law are founded in truth and nature; or in the language of Lord Bacon, that "there are in nature certain fountains of justice, whence all civil laws are derived but as streams; and like as waters do take tinctures and tastes from the soils through which they run, so do civil laws vary according to the regions and governments where they are planted, though they proceed from the same fountains."* Religion too, judged by the varying and contradictory opinions of men, must be pronounced uncertain and conjectural, not merely in its sacred and mysterious doctrines, but even in its more obvious ethical precepts. A rule of judgment, therefore, which is not just in law or religion, certainly cannot be admissible in its application to medicine. Any argument, therefore, drawn from this source against the cer-

* Advancement of Learning, p. 355.

tainty of our science must fall to the ground, inasmuch as if it proves any thing, it proves too much—if admitted in this case, it would subvert the certainty of almost every other science.

The only method of accurately estimating the value of our science is, to judge of it simply by itself, and if this common justice be done, there will be little difficulty in showing that its foundations are laid deep in truth and nature, and therefore, that it is not conjectural. If medicine be uncertain, it must be for one or other of the following reasons. In the first place, because diseases are ever varying in their character. In the second place, because medicines are uncertain in their operation. In the third place, because in the application of remedies to particular diseases so much tact and skill are required, as to place it beyond the rules of an ordinary science.

It is only for one or other of these reasons that medicine can be uncertain ; for if diseases are always the same—if remedies are always certain in their operation, and if the application of remedies to diseases be established upon clear principles or certain observation, no one probably will pretend that medicine is an uncertain art. For the purpose of ascertaining how far all this is justly applicable, I shall make a remark or two upon each of these points.

As diseases occur in a living machine which is liable to be modified by a great variety of causes, it is very evident that they cannot, in all persons and under all circumstances, put on precisely the same appearances. Unless however it can be shown that these differences are altogether arbitrary, and

not governed by any rule, this fact, so far from showing the uncertain character of diseases, goes rather to establish the reverse. Now in tracing back the annals of medicine, we shall find that in all their essential features, diseases are the same in the present day that they were a thousand years ago, and that the modifications to which they are liable in particular subjects, or in different countries, are all owing to the operation of causes, many of which are known and appreciated. The descriptions given us by Hippocrates, especially of acute diseases, are true to this very hour, varied of course in some respects by climate, modes of living, and other circumstances. If therefore the fact of diseases differing in this way were not known, then indeed all would be uncertainty and confusion. The variety might surprise us unexpectedly, and involve us in doubt and error. As the fact however is known that such varieties do occur, and as it is one of the fundamental businesses of our science to analyze these, as well as the causes which give rise to them, it cannot, with any justice, be urged that on this account there is any uncertainty in the general character of diseases.

In the next place, in regard to medicines, they are no more doubtful and uncertain in their operation than diseases are in their symptoms. An emetic will vomit and a cathartic will purge as certainly and invariably now, as they did hundreds of years ago. Under the different circumstances however in which the human system may be placed, they will produce their effects with greater or less facility, and in larger or smaller quantities. Children, for instance, are vomited with greater ease than adults ; as a general rule too in warm

climates, from the greater sensibility of the stomach, smaller doses of emetics are required than in northern regions, where the stomach participates in the general insusceptibility of the whole system. It is very obvious, nevertheless, that all this does not prove any uncertainty in their operation. It merely proves that their effects are controlled and modified by certain circumstances, which it is the province of medical science to elucidate.

In the last place, with regard to the tact and skill required in the application of remedies to diseases, it is not necessary to say much. It should be recollected that medicine is not a mere mechanical art, and therefore does not admit of being reduced to mechanical rules. This, however, by no means proves that it is uncertain, or that it does not rest upon a sure foundation. To become acquainted with the facts and principles which it embraces, is within the reach of any ordinary capacity. But in this, as in every other pursuit, men are not all found equal, and high excellence is not to be attained without a peculiar adaptation of genius. The same holds true of every science. It does so of the mathematics, the most exact of the sciences. Of music also, the principles are well founded, and yet how few are there capable of creating those combinations of sounds which have immortalized the names of Mozart, Handel, and Rossini? And so it is with medicine. In the development, combination, and application of its principles, the genius of one man will shine pre-eminently above his fellows.

In thus contending for the certainty of our science, it is

by no means to be considered as perfect. Resting on the basis of observation and experiment, and these requiring to be made upon man in all his phases, it is very obvious that it must necessarily have been of slow growth. Encountering in itself intrinsic difficulties, we shall find in tracing back its history, that it has suffered from the same causes which exerted an influence so baneful over the other sciences. Eminently fortunate in its first father, who laid its firm foundations, after his time, medicine in common with every other department of knowledge, became the victim of a false philosophy, which if it did not wholly extinguish the lamp of truth, so dimmed and obscured its light, that men groped their way without an object and without a guide. For centuries the human mind was like a vessel driven about on the trackless ocean, without a star or a pilot to direct it. There was one general eclipse of truth over the world. At last the great orb of day arose upon the chaos of the intellectual world. Lord Bacon appeared, and advancing with a giant's strength, bore away upon his shoulders the pillars of the temple of error. With one tremendous crash, the stupendous fabric fell to the ground, burying amid its ruins the labours and genius of ages. Previous to this grand catastrophe, it is true that medicine did not advance, and at this period its condition was such as fully to justify what Bacon says of it. "Medicine is a science which hath been more professed than laboured, and yet more laboured than advanced; the labour having been, in my judgment, rather in a circle than in progression. For I find much

iteration, but small addition.”* Since this sentence was pronounced upon our science, whoever will take the trouble of examination, will find in it the most wonderful improvement. Perhaps a more satisfactory method of showing this could not be resorted to than simply to notice the deficiencies in it, pointed out by Lord Bacon himself. With that intuitive comprehensiveness which so peculiarly characterized his mighty intellect, he saw not merely that the mode of investigating truth was erroneous, “being a philosophy only strong for disputations and contentions, but barren of the production of works for the benefit of the life of man,”† but casting his view over the whole map of knowledge with the hand of a master, he showed wherein the sciences were wanting, and how these wants might be supplied. Among those which he enumerates in medicine are the following.

First. Abandoning the method of Hippocrates in observing, describing, and recording the histories of individual cases of disease.

Second. The neglect of dissections, both of the human subject and of animals, and also post mortem examinations, with the view of comparing the appearances with the symptoms during the disease.

Third. Want of due attention to mitigating the sufferings of patients in diseases which are considered incurable.

Fourth. Neglecting to search for special remedies for particular diseases.

* Advancement of Learning, p. 193.

† Ibid. p. 1.

Fifth. Not taking advantage of the benefit derived from mineral waters, to ascertain their peculiar virtues, so as to make "an imitation by art of natural baths and medicinal fountains."

And lastly. The deficiency which he considers the most important, I shall give in his own words. "The prescripts in use are too compendious to attain their end; for to my understanding, it is a vain and flattering opinion to think any medicine can be so sovereign or so happy, as that the receipt or use of it can work any great effect upon the body of man. It were a strange speech, which, spoken, or spoken oft, should reclaim a man from a vice to which he were by nature subject: it is order, pursuit, sequence, and interchange of application, which is mighty in nature; which, although it require more exact knowledge in prescribing, and more precise obedience in observing, yet it is recompensed by the magnitude of effects."*

To any one acquainted with the present state of medicine, the bare enumeration of these deficiencies carries with it the proof of the vast improvements which have been made since the period in which Lord Bacon wrote. Were it proper to go into details, it might triumphantly be shown, that physicians, guided and illumined by the principles of the Baconian philosophy, have been pursuing the path which has led the way to so many discoveries in the other sciences. The Hippocratic method of studying disease has been re-

* Advancement of Learning, p. 199.

vived. Anatomy and physiology, as built upon dissections of animals and of the human subject, have been pursued with unparalleled ardour, and are now justly considered as the only rational basis of practical medicine. The post mortem examinations with the view of ascertaining the seats of disease, and comparing them with the symptoms previous to death, have been carried far beyond what might have been anticipated. For many diseases, before intractable to general methods, special remedies have been discovered. By the aid of chemistry, mineral waters have been analyzed, and the knowledge thus obtained successfully applied in the treatment of disease. All this has been done, and it is glory enough for any science to have accomplished every thing which the capacious mind of a Bacon could suggest as necessary.

Notwithstanding all this, I am aware that it may be said that the spirit of theory and hypothesis still contaminates our science, and exerts its deleterious influence over our practice. To this it is sufficient perhaps to reply, that theorists are not the just representatives of medicine any more than those visionaries who mystify their brains to discover perpetual motion, are the just representatives of natural philosophy ; or than the aberrations of a disturbed intellect are to be taken as a fair sample of the operations of a sound understanding. The truth is, theories do infest medicine, and will probably continue to do so to the end of time. These however are not to be considered as making up any part or portion of the science. On the contrary, they are

the mere blots upon the surface—the excrescences, which like those of the body, shoot out from the weakest parts. They are the intervening bodies, which may for a time eclipse, but cannot extinguish its glory. Unlike truth and true philosophy, the spirit of theory is arrogant and exclusive. That prince of quacks and theorists, Paracelsus, acted it out in full when he ordered all the works of his predecessors to be solemnly burnt before him while gravely seated in his professorial chair, at Basil; at the same time declaring, that no one need scruple getting certain secrets of physic from the devil, and boasting of his holding a conversation with Galen and Avicenna at the gates of hell. Another celebrated theorist of the present day, although the taste of the age does not permit him to consign to the flames the labours of those who have gone before him, with quite as little ceremony, denounces the whole of them as useless and vain, and holds himself up as the first and true founder of medicine. Trusting to the representations of the author of the “new doctrine,” as it is styled, we should be led to suppose that he is at last the true prophet, sent to expose the errors and delusions of all preceding times—that for centuries men have been wandering in darkness, and that he has been commissioned for the first time to hold before their astonished eyes, the torch of truth—that he has found the key to the paradise of knowledge, and at his “open sesame,” all its flood-gates are to be thrown open—that he is the mighty necromancer, who is to pour out his oil, and calm the troubled waves of controversy and disputation—that he is to extend

his magic wand over the medical world, and the millenium of our science is to commence. And what is the wonderful revelation which is to effect all this? What is the "philosopher's stone" which, after the search of ages, has at last been discovered? Substantially nothing more nor less than this—That what physicians have been in the habit of calling Fever, from time immemorial, is nothing more than "Gastro-Enteritis," and that the whole of the practice of medicine is to be reduced down to the use of leeches and gum-water! A discovery about as profound as Paracelsus flattered himself he had made in his famous elixir, by means of which he gravely maintained that he could prolong the life of man to the age of Methusaleh; and a practice about as rational as the bloodletting and hot water of Dr. Sangrado!

Now with such follies and extravagancies, medicine, in its true and just acceptation, has nothing to do. As a science, it is made up of that great mass of fact and principle, which has been accumulated by the labours of successive generations, having for its basis the certainty of observation and experiment. It is worthy of remark too, that however theorists may have differed and disputed, the great principles of practice have not undergone any corresponding mutations. An inflammation of the brain, for example, has always been treated very much as it is at this present time. And with regard to the theories themselves, it is gratifying to observe how completely the spell of their influence has been broken. During the last century, for

instance, how short-lived and limited have they been when compared with those of earlier date ! The doctrines of Galen, like the logic of Aristotle, held in base servitude the whole medical world for upwards of twelve hundred years. About the middle of the fifteenth century, the theories of the chemical and mechanical physicians bore sway, and with various modifications maintained their ascendancy until the time of Dr. Cullen. Since then, theory has followed theory in quick succession, each succeeding one exposing the fallacy of its predecessor, and the whole tending to strengthen the general conviction upon the minds of intelligent and reflecting men, that all should be discarded. Why these theories have enjoyed even this ephemeral existence, is of easy explanation. Generally speaking, along with much error, they have contained some truth, and the whole has been interwoven with so much plausibility as to gain them a temporary currency. In addition to this, they have usually been promulgated by teachers of medicine whose opinions, especially if they contain any novelties, are apt to be received with enthusiasm by youthful and ardent minds. In this way have many theories enjoyed a popularity which, under other circumstances, they would never have attained. Yet notwithstanding all these artificial aids, they have scarcely survived beyond the death of their respective authors, and even if they did, a single generation of physicians, educated under another teacher, has been sure to sweep away every vestige of them. Cullenianism—Brunonianism—Darwinianism, and all the other *isms*, have chased each other down

to their peaceful slumbers: and at present, if we except the theory of Broussais, we have none prevalent of any importance. And even the "new doctrine" is already sinking into a premature grave. It is highly honourable to the independence and discrimination of the profession on this side of the Atlantic, that of the numerous schools of medicine which we have in the United States, only one has been infected with the gum-water theory.

There is another objection which has frequently been urged against medicine, which it is proper should not be concealed; and this is, that it leads to *religious infidelity*. In answering this charge, it is essential that its precise nature and extent should be accurately defined and understood. A little reflection will make it obvious that it involves two things quite distinct; and these are, in the first place, that as a matter of fact, physicians are justly tainted with the charge of scepticism; and in the second place, that supposing this to be the fact, it is the genuine and necessary result of the study of medicine. Both these enter into the general charge, and unless both can be substantiated, the whole must fall to the ground. It is not necessary to inquire very minutely into the first of these propositions. Indeed, it would not be a very easy task to make out a scale by which to judge of the relative degrees of scepticism pervading the ranks of our profession and those of other classes of individuals. That physicians have existed and do exist, who by their infidelity have dishonoured the fair fame of our profession, cannot be denied. On the other hand,

the fact is equally certain, that many of its most distinguished members have been the sincere and unaffected believers in the truths of religion. And another fact is equally unquestionable, that medical men, as a body, at least so far as we see them in this country, are quite as distinguished for their zeal in the cause of piety as any other class of men pursuing a calling purely secular. Admitting all this however, the question still remains, does the study of medicine give the mind any bias to infidelity? Does it tend to weaken the foundations upon which our faith in religion is founded? To my mind nothing is clearer than that it does not, if it be followed by its legitimate results; and for any other results we certainly are not responsible. To a well disciplined and reflecting mind, is there any thing in the study of that curious and delicate structure, the human body, which displays the power and skill of the divine architect more than all the blazing wonders of the heavens—is there any thing in the study of diseases, their symptoms, causes or cure, which can possibly produce such effects? On the contrary, is not the direct tendency of such studies to force upon the mind the conviction of the existence and controlling superintendence of a superior Power—and at the same time, that man, though fearfully and wonderfully made, is a frail and transitory and dependent being. The truth is, it is impossible that medicine, if properly cultivated, can ever be subversive of morals or religion; and the whole history of our art, from its earliest infancy down to the present hour, furnishes the most satisfactory evidence of the truth of this statement. But I cannot stop to pursue this subject.

I have thus, gentlemen, in a very rapid manner thrown out some general ideas in relation to the science which you have chosen as the study of your future lives, and have endeavoured to show that it is founded in truth and nature—that it is capable of giving full scope and development to all the mental faculties, and if properly viewed, to strengthen the feeling of reverence for the great Creator of all things. It is truly a noble science, and the youthful votary need not be afraid of giving up to it the full and undivided power of all his faculties.

In undertaking to lecture on a science of which I entertain such exalted opinions, I feel conscious of assuming a high and sacred responsibility. To the student, much, I had almost said every thing, depends upon the impulse which he receives on commencing his studies. Early impressions are always the most vivid and lasting; and it is in the lecture-room that opinions are imbibed which may tinge the whole professional career of the physician. It is here that he insensibly acquires his habits of thinking in relation to medical subjects. It is here that he receives, unconsciously perhaps, a bias to particular doctrines or theories. It is here, if ever, that he is to be inspired with a love of his science. It is here, in short, that he is to lay the foundation of a character which is to bless or to curse mankind. Under the full conviction of these considerations, it should be the constant endeavour of the teacher to conduct all his instructions. Associated with colleagues distinguished for learning and talent, and whose services in the cause of science are known

and appreciated, not merely in this country, but in Europe, I feel confident that you will hear nothing in this institution which is not calculated to give a just and honourable direction to all your labours.

To reap the full benefit however of their instructions, there is one thing essential, and that is, *co-operation on the part of the student*. No one was ever yet made a learned man, or a great physician, by simply listening to the instructions of others. To become such, he must labour for himself. And by doing so, by the beneficent disposition of Providence, it will be found that every one has his character entirely at his own disposal. There are some men so favoured of heaven that the outpourings of their mighty intellects seem but like the transmissions of celestial intelligence. These, however, are rare, very rare exceptions—*rari nantes in gurgite vasto*—and beyond these, the universal law of our nature holds true, that nothing great or good can be accomplished without labour; and *with* this, even ordinary minds can accomplish almost every thing. This is the true Aladdin's lamp which converts into sober realities all the glittering visions of the imagination. It is this that has felled the forest—erected cities—founded empires—controlled the world. Now this mighty agent every man has at his command, and he has only to use it properly to secure all that enthusiasm can inspire, or ambition covet. To do this successfully, it is necessary to begin early. Youth is the proper season for enterprise and exertion; and if they be not displayed then, as a general rule, they will be looked for in

vain at any subsequent period. If you analyze the history of the men who have astonished the world by their exploits, you will find that a large proportion of them have performed their greatest achievements in early life. Alexander the Great, who sighed that he had no more worlds to conquer, died at the age of thirty-two. At the age of twenty-five, Napoleon crossed the Alps. At twenty-seven, Cicero undertook the celebrated defence of Roscius the player, which laid the foundation of his after fame—the very same age at which Demosthenes first began to distinguish himself at Athens; “as if,” says the historian of Cicero, “in these geniuses of the first magnitude, that was the proper season of blooming towards maturity.”* The great Linnæus sketched the outline of his *Systema Naturæ* before he was twenty-four years old; and at the early age of twenty-six, Calvin published the work which has immortalized his name—“*the Institutes of the Christian Religion*,” containing a system of doctrines which with no material alterations, continues to govern the religious creed of a large section of the christian world.

In our profession, the absolute necessity of early and assiduous study is especially evident. A knowledge of medicine is not to be gained by intuition. What is true of the poet, *Poeta nascitur, non fit*, is altogether inapplicable to our science. Such attainments in it as shall make their posses-

* Middleton's Cicero.

sors revered while living and transmit their names with honour to remote posterity, must be the result of long and ardent labour, for which the most protracted life is but too brief. It was under the full conviction of this truth, that the father of medicine uttered that memorable apothegm—*ars longa, vita brevis est*. Begin then, gentlemen, early, and let nothing interfere with the great object to be proposed to your ambition—that of *distinction in your profession*.

